

## Claims

- [1] A method for allocating multiple access channels at a time of call setup in a mobile communication system including a number of mobile stations and a base station having a modem and a channel card, said method comprising the steps of: informing a mobile station that the modem of the base station is using one access channel by an access parameter message, which is a paging channel message; dividing a coverage area of the base station into a number of sub-areas; allocating a number of access channels such that each of the access channels covers its corresponding sub-area; monitoring the access channels to determine whether an access probe transmitted from the mobile station has been acquired; and if the access probe has been acquired, outputting the acquired access probe to the channel card and releasing the remaining access channels.
- [2] The method in accordance with claim 1, wherein if an access probe transmitted from the mobile station has not been acquired in said determining step, the method further comprises the step of reallocating a number of access channels, each of which covers its corresponding sub-area and undergoes said determining step again.
- [3] The method in accordance with claim 1, wherein said allocating step sets each of the access channels to have a long code mask by using the same paging channel ID and the same access channel ID, and sets Search Start Offset parameter and Search Window Size parameter to each of the sub-areas so that each access channel searches a different sub-area.